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# **HENDERSON MANUFACTURING INC.**

Manchester, Iowa (Delaware County)

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## The Company

Henderson Manufacturing, Inc. produces a line of truck accessories ranging from snow and ice control parts to several styles of dump bodies. Operating for over 40 years, Henderson sells finished products to local and regional dealers, as well as supplying equipment under contracts with state and local governments. Henderson manufactures several types of snowplows, v-box spreaders for sand or salt, and many styles of dump body for light commercial to heavy municipal or governmental work. Products are completely assembled and painted on site, and either shipped to the dealer for installation or installed on site.

## **Project Background**

The company had been investigating the opportunity to implement an inventory location management system. They had established some location control techniques but lacked the full training and documentation required for the project to be an on-going success.

## Incentives to Change

The potential benefits of an inventory location management system are: cost savings based on more efficient production; less wasted time and energy; less overproduction of parts; more efficient design; and better overall inventory control.

#### Results

Henderson Manufacturing helped reduce waste generation by improving and expanding their current inventory management system. This increased control will significantly affect the major sources of waste resulting from improper inventory control: excess parts, out-of-date parts, and no-longer used raw materials. The purchase of only the amount of raw materials needed for a production run or a set period of time is one of the keys to proper inventory control.

The main goal of the inventory location management project at the company was to set in motion a functional location labeling and item placement system.

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This primarily entailed entering a "prime bin" location for each part inventoried, and printing a label for racks and shelves showing where each part was located. The project expanded far beyond the initially proposed solution. Besides the Production office, which directly controls inventory, the Finance, Engineering, and Sales departments, along with the shop floor, all provided inventory improvements. A few solutions dealt only with easing manufacturing by explicitly identifying a part, where it is to be stored, and how it is to be stored. Other options considered several variables to determine how many parts to manufacture at a time, and the amount of purchased material to have on hand.

The company projects cost savings of between \$500,000 to \$1,000,000 annually based on the following:

- ♦ Less wasted time looking for parts.
- Less inventory adjustment, shrinkage, and compensation;
- ♦ Less lost production time.
- ♦ More efficient yearly physical inventories.

#### Cost savings opportunities for Henderson:

♦ Implement system of inventory management	\$150,000 - \$300,000
♦ Modify interdepartmental routine	\$ 90,000
♦ Increase accessibility of part schematics	\$109,000
♦ Gradually standardize engineering	up to \$300,000
♦ Implement a system of barcoding	\$100,000 to \$250,000